

## ELECTRONIC ACCESS TO CARE SYSTEM: IMPROVING PATIENT'S ACCESS TO CLINICAL INFORMATION THROUGH AN INTERACTIVE VOICE RESPONSE (IVR) SYSTEM AND WEB PORTAL.

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### **Background:**

Our clinical providers spend an estimated four hours weekly answering phone messages from patients. Our nurses spend five to ten hours weekly on returning phone calls. Most of this time is spent conveying recent clinical results, reviewing with patients the discharge instructions such as consults or studies ordered during the office visits, and handling patients' requests for medication renewals. Over time this will lead to greater patients' dissatisfaction because of lengthy waiting time and lack of timely access to their medical information. This would also lead to greater nursing and providers' dissatisfaction because of unreasonable work load.

### **Process:**

The hassle factors that we have identified are inefficient communication of clinical results, inconvenient process for medication renewals, and cumbersome intake and discharge procedures. This project seeks to eliminate these factors through a patient web portal and IVR system that leverage the core functionality of our existing clinical information system (ICDB) and the Military Health System web portal, Tricare Online. Our hybrid IVR-Web portal allows patients to retrieve results of clinical tests, review summaries of their discharge information, place requests for medication renewals, examine their personal clinical outcome scorecards, and fill out online health surveys. For medication renewal, this system uses a computerized algorithm to automate and reduce the number of inefficient steps during the renewal process. Patients can choose to access these functions either through the web portal or through our IVR system that offers text to speech translation over the phone.

### **Conclusion**

With successful implementation we expect to see less demand for appointments for medication refills or for reviewing results of labs and diagnostic studies. With improved access to clinical results and scorecards, patients will be more aware of the goals and complications of their treatment and conditions. With improved access to clinical information, patients will be more attentive to their treatment plan, diagnosis, and healthcare maintenance schedule. With reduced waiting time for medication renewal, patients will less likely to go without medications while waiting for their renewals to be processed.